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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|----------------|-------------------------|---------------------|------------------|
| 09/884,839 | 06/19/2001 | Frank Heine | 1589 | 2481 |
| 7: | 590 06/24/2002 | | | |
| STRIKER, STRIKER & STENBY | | | EXAMINER | |
| 103 East Neck Huntington, NY | | | LIN, TINA M | |
| Hundington, 141 11743 | | | | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2874 | |
| | | DATE MAILED: 06/24/2002 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|--|-----------------------------|---|--|--|--|--|
| | Application No. | hpplicant(s) | | | | |
| • | 09/884,839 | HEINE ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Tina M Lin | 2874 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | | | | | |
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | |
| 1) Responsive to communication(s) filed on | · | | | | | |
| · —— | nis action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-7</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdra | | r. | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-7</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | , _ _ | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9)⊠ The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>June 19,2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Applicant may not request that any objection to tr | ie drawing(s) be neid in | disapproved by the Examiner. | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| , | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☑ All b) ☐ Some * c) ☐ None of: | | | | | | |
| a) ☑ All b) ☐ Some c) ☐ None of: 1. ☑ Certified copies of the priority documen | its have been receive | d. | | | | |
| | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) No | erview Summary (PTO-413) Paper No(s) tice of Informal Patent Application (PTO-152) ner: | | | | |

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Acknowledgement is made of applicants claim for foreign priority based on an application filed in Germany on June 21, 2000.

The disclosure is objected to because of the following informalities: Throughout, the abbreviation "Cer" is objected to. The correct abbreviation for the element Cerium is "Ce". Appropriate correction is required. The applicant's cooperation is requested in correcting any other errors of which applicant may become aware of in the specification.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or (2) a patent granted on an application for patent by another filed in the United States before the

invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claim 1 is rejected under 35 U.S.C. 102(e) as anticipated by U.S. Patent 6,198,870 B1 to Kubota et al. As for claim 1, Kubota et al. discloses an optical waveguide with a core being doped with both erbium and cerium. (Column 7 Line 22-26) In Column 8

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Line 7-9, Kubota et al. discusses the further use of laser active ions such as Yb, Ho, and Nd.

- 4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,198,870 B1 to Kubota et al. As for claim 2, Kubota et al. discloses as one example a concentration of 1 wt % of Er and 1 wt % Ce. (Column 5 Line 46-47) This concentration falls in between the applicant's claimed range of concentration. Kubota et al. further discusses other ranges of concentration through three other examples. (Column 4 Line 43-44, Column 6 Line25-26, and Column 6 Line 58-59) Therefore, it is evident that other ranges of concentration would have been obvious to a person of ordinary skill in the art. As for claim 3, Kubota et al. teaches the use of fluoride, oxyhalide, and chlorine glasses as waveguide fiber materials. (Column 7 Line 27-29) Therefore, it would have been obvious to a person of ordinary skill in the art to use other well known glasses, such as a silicate fiber in place of the before mentioned material. Kubota et al. also discusses the idea of co-doping to adjust the refractive index profile in a fluoride glass fiber. (Column 5 Line 44-51) Therefore, the use of the co-doping technique to adjust a refractive index profile in another material, such as silicate fiber, would have been obvious to a person of ordinary skill in the art.
- 5. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,19**8**,870 B1 to Kubota et al. as applied to claims 1-3 above, and further in view of U.S. Patent 5,537,505 to Borrelli at al. Kubota at al. discloses an optical waveguide, co-doped with laser active ions and cerium, but does not disclose the use of a waveguide specifically as an optical amplifier, optical power amplifier, a laser or as an

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optical device which is used under radiation loading. Borrelli et al. teaches the art of using an optically active glass ceramic article as an optical waveguide fiber amplifier or laser. (Column 11 Line 26-31) Therefore, use of the Kubota at al. compositions as optical amplifiers, lasers and optical devices, which are used under radiation loading, would certainly have been obvious to a person with ordinary skill in the art.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In references B, C, E, and G, the idea of co-doping with laser active ions is discussed. In reference F, the use of a waveguide as a laser is taught and in reference D, the applicants own publication, the idea of doping a fiber with cerium and additionally doping the same fiber with laser active ions are discussed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M Lin whose telephone number is (703) 305-1959. The examiner can normally be reached on Monday-Friday 8:30-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (703) 308-4819. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

TML 7011_ June 18, 2002

John D. Lee
Primary Examiner